



## CLAIMS

What is claimed, and desired to be secured by letters of patent is:

1. A toy vehicle comprising:  
vehicle chassis or frame having a plurality of wheels,  
motor driving at least one wheel of the vehicle,  
input control means to enable a player to control the motor, and interact with the vehicle, and  
additional means to control the operation of said motor independent of control signals received from the input control means.

2. The toy vehicle of claim 1, wherein said additional means to control the operation of said motor includes an algorithm that employs random elements to determine when the motor is activated independent of control signals received from the input control means.

3. The toy vehicle of claim 1 further comprising a receiver mounted in the vehicle to receive signals from a transmitter unit located remotely from said vehicle.

4. The toy vehicle of claim 3 wherein said input control means are located on the transmitter unit.

5. The toy vehicle of claim 1 wherein the operation of the motor is at certain times responsive to said input control means, and at other times is not responsive to, and is independent of, the input control means.

### **Claim 6 has been cancelled**

7. The toy vehicle of claim 1 wherein said additional means to control the operation of the motor may at certain times generate motion signals that conflict with signals received from said input control means.

8. The toy vehicle of claim 1 further comprising a mechanism to steer the vehicle.

9. The toy vehicle of claim 1 wherein the housing of the vehicle is shaped as a motorcycle, car, truck, van, military tank, train, plane or a boat.

10. A toy vehicle comprising:
  - vehicle chassis or frame having a plurality of wheels,
  - motor driving at least one wheel of the vehicle,
  - input control mechanisms to enable a player to control the motor, and interact with the vehicle,
  - a microprocessor,
  - a control logic executed on a processor to control the operation of the vehicle,
  - a control logic segment that generates interactions with the user of the vehicle,
  - computer memory to store user's responses to interactions, and
  - a control logic segment that controls the operation of said motor independent of the control signals received from input control mechanisms, or in the absence of such control signals, and based on user's responses to interactions.

**Claim 11 has been cancelled**

12. A toy vehicle as recited in claim 10, wherein said control logic segment that controls the operation of the motor is based on a first algorithm that derives or defines knowledge information, which includes normal responses to interactions, and a second algorithm that evaluates the user's response to interactions, for classifying into one of a plurality of categories, wherein a first category corresponds to a normal response, and at least a second category corresponds to a response that is different from the normal response.

13. The toy vehicle of claim 10 further comprising a receiver mounted in the vehicle to receive input control signals from a transmitter unit located remotely from said vehicle.

14. The toy vehicle of claim 13 wherein said input control mechanisms are located on the transmitter unit.

15. The toy vehicle of claim 10 wherein said responses includes plugging in accessories into the toy vehicle.

16. A toy vehicle comprising:

vehicle chassis or frame having a plurality of wheels,  
motor driving at least one wheel of the vehicle,  
input control mechanisms to enable a player to control the motor, and  
interact with the vehicle,  
a microprocessor,  
a software program executed on a processor to control the operation of the vehicle,  
a program segment that generates interactions with the user of the vehicle,  
computer memory to store user's responses to interactions,  
a program segment that derives or defines knowledge information, which  
includes normal responses to interactions, and  
a program segment that controls the operation of said motor independent  
of the input control mechanisms, and based on evaluating user's responses  
to interactions, and comparing such responses to normal responses.

17. The toy vehicle recited in claim 16, wherein said responses include activating accessories to the vehicle.

18. The toy vehicle recited in claim 16, wherein said responses include plugging in accessories to the vehicle.

19. The toy vehicle recited in claim 16, wherein said program segment that controls the operation of the motor independent of the input control mechanisms, causes the vehicle to operate in a plurality of states.

20. The toy vehicle recited in claim 19, wherein said plurality of states includes a first state during which the operation of the motor is totally responsive to input control mechanisms, and a second state during which the operation of the motor is at certain times responsive to input control mechanisms, and at other times is totally not responsive to said input control mechanisms.

21. A toy vehicle as recited in claim 20, further comprising a program segment that controls the vehicle to execute one or more pre-programmed movements during said second state when the motor is not responsive to input control mechanisms.

22. A toy vehicle comprising:

vehicle chassis or frame having a plurality of wheels,  
motor driving at least one wheel of the vehicle,  
input control mechanisms to enable a player to control the motor, and  
interact with the vehicle,  
a microprocessor,  
a software program executed on a processor to control the operation of the vehicle,  
a program segment that generates interactions with the user of the vehicle,  
and  
a program segment that controls the vehicle to operate in a plurality of states, including a first state during which the operation of said motor is responsive to the input control mechanisms, and a second state during which the vehicle executes one or more pre-programmed movements that are not responsive to the input control mechanisms.

23. A toy vehicle as recited in claim 22, wherein said program segment that controls the vehicle to operate in a plurality of states is based on evaluating user's responses to interactions, and comparing such responses to predefined normal responses.

24. A toy vehicle as recited in claim 22, wherein said program segment that controls the vehicle to operate in a plurality of states is based on an algorithm that employs random elements, and which determines when the operation of the motor is responsive to control signals received from the input control mechanisms.

25. A toy vehicle as recited in claim 22, wherein said input control mechanisms include plurality of push buttons, switches, pressure switches, touch switches, sensors, voice activated switches, push buttons located on a remote control apparatus, or accessories that can be plugged into the vehicle to enable a user to control the vehicle and provide responses to interactions.

26. A toy vehicle as recited in claim 1, wherein said input control means include a plurality of push buttons, switches, pressure switches, touch switches, sensors, voice activated switches, push buttons located on a remote control apparatus, or accessories that can be plugged into the vehicle.

27. A toy vehicle comprising:  
vehicle body having a plurality of wheels,

motor driving at least one wheel of the vehicle,  
input control mechanisms to enable a player to control the motor and interact with the vehicle,  
a microprocessor or a micro-controller to control the operation of the vehicle, and  
a control logic executed on the processor, and which controls the operation of the motor independent of control signals received from said input control mechanisms.

28. A toy vehicle as recited in claim 27 wherein said control logic includes an algorithm that employs random elements, and which determines when the operation of the motor is independent of the control signals received from input control mechanisms.

29. A toy vehicle as recited in claim 27 wherein said control logic is based on an algorithm that evaluates user's responses to interactions generated by the vehicle, and which determines when the operation of the motor is independent of the control signals received from input control mechanisms.

30. A toy vehicle as recited in claim 27 wherein said control logic is based on an algorithm that evaluates user's interactions with the vehicle to determine when the operation of the motor is responsive to control signals received from the input control mechanisms, and when the operation of the motor is independent of said control signals.

31. A toy vehicle as recited in claim 27 wherein said control logic is based on an algorithm that evaluates user's interactions with the vehicle to determine when the operation of the motor is responsive to control signals received from input control mechanisms, and when the operation of the motor is based on pre-programmed movements.

32. A toy vehicle as recited in claim 27 wherein said control logic is based on an algorithm that compares user's responses to interactions initiated by the vehicle with anticipated responses to determine when the operation of the motor is responsive to control signals received from input control mechanisms, and when the operation of the motor is independent of said control signals.

33. A toy vehicle as recited in claim 27 wherein said control logic is based on an algorithm that evaluates user's interactions with the vehicle to determine when the

**operation of the motor is responsive to control signals received from input control mechanisms, and when the operation of the motor is opposite to, or conflicts with, the motor's operation corresponding to said control signals.**

34. A toy vehicle as recited in claim 27 wherein said control logic is based on an algorithm that employs random elements, which determine when the operation of the motor is responsive to control signals received from input control mechanisms, and when the operation of the motor is opposite to, or conflicts with, the motor's operation corresponding to said control signals.

35. A toy vehicle as recited in claim 27, further comprising a mechanism to steer the vehicle.

36. A toy vehicle as recited in claim 35 further comprising a control logic segment that controls the operation of the steering mechanism independent of control signals received from the input control mechanisms.

37. A toy vehicle as recited in claim 36 wherein said control logic segment is based on an algorithm that employs random elements, which determine when the operation of the steering mechanism is responsive to control signals received from input control mechanisms, and when the operation of the steering mechanism is opposite to, or conflicts with, the steering operation corresponding to said control signals.

38. A toy vehicle as recited in claim 36 wherein said control logic segment is based on an algorithm that evaluates user's interactions with the vehicle to determine when the operation of the steering mechanism is responsive to control signals received from the input control mechanisms, and when the operation of the steering mechanism is independent of said control signals.